

Face-to-Face Training on *Opioid Safety: Focus on Furnishing Naloxone* by Community Health Nurses at Pharmacy and Non-Dispensing Sites across Pennsylvania

Final Evaluation Report

August 31, 2019

Introduction

The Pennsylvania (Pa.) Department of Health (DOH) lead a statewide training initiative to educate pharmacists, medical and behavioral health providers, school administrators and staff, and other relevant stakeholders on various topics related to the opioid epidemic. Community Health Nurses (CHNs) delivered each training and they tailored the curriculum to the interests, needs, and time constraints of each participant. For this reason, the specific topics covered in each training visit as well as the visit duration varied for each participant. The CHN curriculum included: 1) epidemiologic data and trends on the opioid crisis (e.g., overdose deaths, prescription drug use), 2) the role of health care practitioners and pharmacists in opioid safety including information on Prescription Drug Monitoring Program (PDMP) registration requirements, how to assess for risk of overdose, and how to communicate with patients and other prescribers about opioids; 3) medication assisted treatment options for Opioid Use Disorder (OUD) and 4) information on naloxone including Pa.'s Standing Order for naloxone prescriptions and how to use naloxone to respond to an overdose. Following each training, the CHNs administered post-training surveys to gauge participant learning and attitudes regarding the specific topics covered in the session. Curriculum materials were standardized across dispensing and non-dispensing sites and used as a guide for CHN. Significant tailoring of the training was expected and the goals of education varied depending on whether the site was dispensing controlled substances. The CHNs primarily focused on naloxone education and OUD treatment resources at the non-dispensing sites. This report presents findings from Public Health Management Corporation's Research and Evaluation Group's (R&E Group) evaluation of the initiative.

Data

Surveys were developed to assess the success of the CHN-delivered training. Two survey versions were used—one version for pharmacists (i.e., dispensing sites) and another version for all other participant groups (i.e., non-dispensing sites). The survey administered to dispensing sites was identical to that used when the PDMP office conducted a similar initiative in 2016-17, which had questions that were to be asked prior to and following the training. The *dispensing site survey* collected information about the pharmacy (e.g., name, address, license number) and pharmacist (e.g., name, license number, contact information), date of CHN visit, and CHN time spent traveling and conducting the training. The pre-training survey items asked pharmacists about their PDMP registration status, how likely they were to use the PDMP for dispensing using a 10-point Likert scale (1 = not at all likely to 10 = extremely likely), whether they keep naloxone in stock and if they would order naloxone if a patient asked. The post-

training survey items asked pharmacists to identify the most important training component and the most useful training format. They were also asked, using a 10-point Likert scale (1 = not at all likely to 10 = extremely likely), how likely they are to register for the PDMP and how likely they are to use the PDMP for dispensing.

The *non-dispensing site survey* was developed by R&E Group in collaboration with the Pa. PDMP office. The survey collected information on the date and duration of the visit, type of site (e.g., hospital, long-term care facility, public school), and role of the interviewee (e.g., medical provider, administrative staff, social worker). The survey was administered following the training and collected data on the topics in which the interviewee would like more information and the topics covered during the visit. Using a 5-point Likert scale (1 = strongly disagree; 2 = disagree; 3 = neither; 4 = agree; 5 = strongly agree) interviewees were asked to report to what extent they agreed that the information covered during the visit would be useful in their job and as a bystander. Additional questions asked whether the interviewee had ever known someone misusing opioids, wanted to intervene with someone, witnessed an overdose, or referred someone for opioid use disorder (OUD) treatment. The final set of questions asked the interviewee if specific trainings have occurred at their organization and if not, to what extent they agree that they will plan to host the corresponding training using a 5-point Likert scale (1 = strongly disagree; 2 = disagree; 3 = neither; 4 = agree; 5 = strongly agree). They were also asked about their access to naloxone. If they reported that they did not carry or have access to it on site, they were asked to what extent they agree they will carry naloxone and/or stock naloxone on site using a 5-point Likert scale (1 = strongly disagree; 2 = disagree; 3 = neither; 4 = agree; 5 = strongly agree).

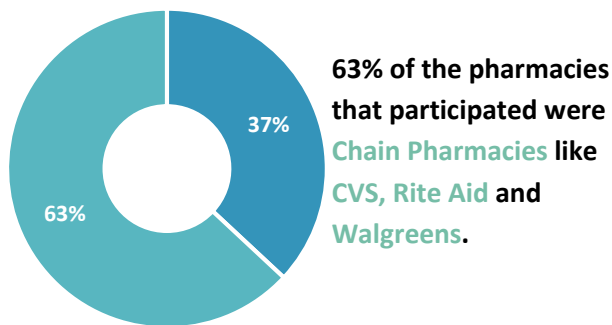
CHNs administered the relevant survey to participants as an interview. They recorded responses on a paper-survey and then entered the data into spreadsheets hosted by DOH. The R&E Group received the data from dispensing and non-dispensing sites on a weekly basis from the PDMP Office.

Results

Dispensing Sites

CHNs conducted trainings for 157 dispensers throughout the Commonwealth between March 28, 2019 and August 7, 2019. The Bureau of Community Health Systems selected dispensing sites by contacting pharmacies that were on a statewide list provided by the Pa. PDMP office. CHNs scheduled appointments with the pharmacists by phone prior to visiting the sites. The dispenser-focused surveys examined the pharmacist's PDMP registration status, whether or not their pharmacy stocks naloxone (e.g. Narcan), their rated likelihood of registering for the PDMP (if the pharmacist was not currently

registered), and their rated likelihood to utilize the PDMP before dispensing controlled substances. Likelihood ratings were completed prior to and following the training, allowing analysis on the impact of the training.



The majority of dispensing sites were located in Southeastern Pa. (68%) with almost two-thirds (63%) in Berks, Delaware, and Lancaster counties. The remaining sites (37%) were located in 15 other Pa. counties. In addition, 63% of the dispensing sites were chain pharmacies such as CVS, Rite Aid, and Walgreens. The length of visits ranged from 5-

30 minutes with a vast majority 10 (43%) or 15 (41%) minutes in duration. Length of visit was similar among both chain and non-chain pharmacies with 49% conducted in 10 minutes or less on training within the two pharmacy types.

Responses. The vast majority of pharmacists who completed the survey indicated that they were already registered for the PDMP (98%) and registration status was unknown for the remaining respondents. When pharmacists were asked whether they kept naloxone in stock ($n = 153$), the vast majority (88%) indicated that naloxone was stocked at their pharmacy. With the exception of one CVS site, all the pharmacies that did not stock naloxone were privately-owned non-chain pharmacies.



Furthermore, results of a dependent t-test indicated that there was no difference between pharmacists' ratings of how likely they were to use the PDMP when dispensing controlled substances prior to training ($M = 8.99$, $SD = 1.95$) and following the training ($M = 8.99$, $SD = 1.95$), $t(142) = .00$, $p = 1.00$. Pharmacists

reported they were highly likely to use the PDMP both prior to and following the training.

Regarding important training components, the most commonly endorsed component was "Referring at-risk patients to substance use treatment programs" (11%), followed by "Related policy and legislation" (10%), "Identifying red flags" (9%), "Prescribing guidelines" (7%), "Querying information" (6%), "Use of naloxone" (4%), and



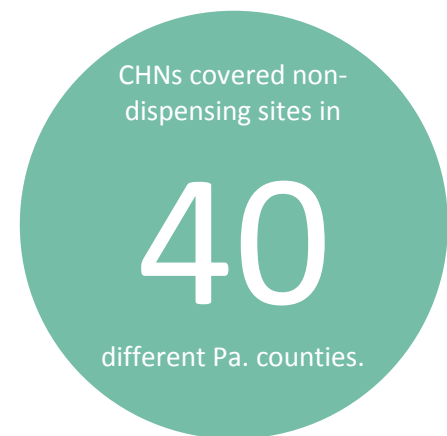
“Entering/recording information” (1%), as the most important training components. No pharmacists endorsed “Registration” as important, as they were likely already registered for the PDMP. Of those who selected a preferred training format (n=43), 67% of respondents selected online training through a webinar or continuing education and only 13% selected in-person training. Approximately three-fourths (73%) of pharmacists indicated they did not need a future training on the content that was being offered under this initiative.

Non-Dispensing Sites

Community Health Nurses (CHNs) also delivered trainings to 226 individuals at non-dispensing sites throughout the Commonwealth between May 2, 2019 and August 7, 2019. CHNs identified non-dispensing site locations in their counties and made appointments by phone prior to visiting the site. Post-training surveys were conducted in person by the CHNs during the visit. The surveys collected information about participants including their role within the site, experience with opioids and naloxone along with their perceptions of the training including the extent to which it was helpful and topics for which they required additional training.

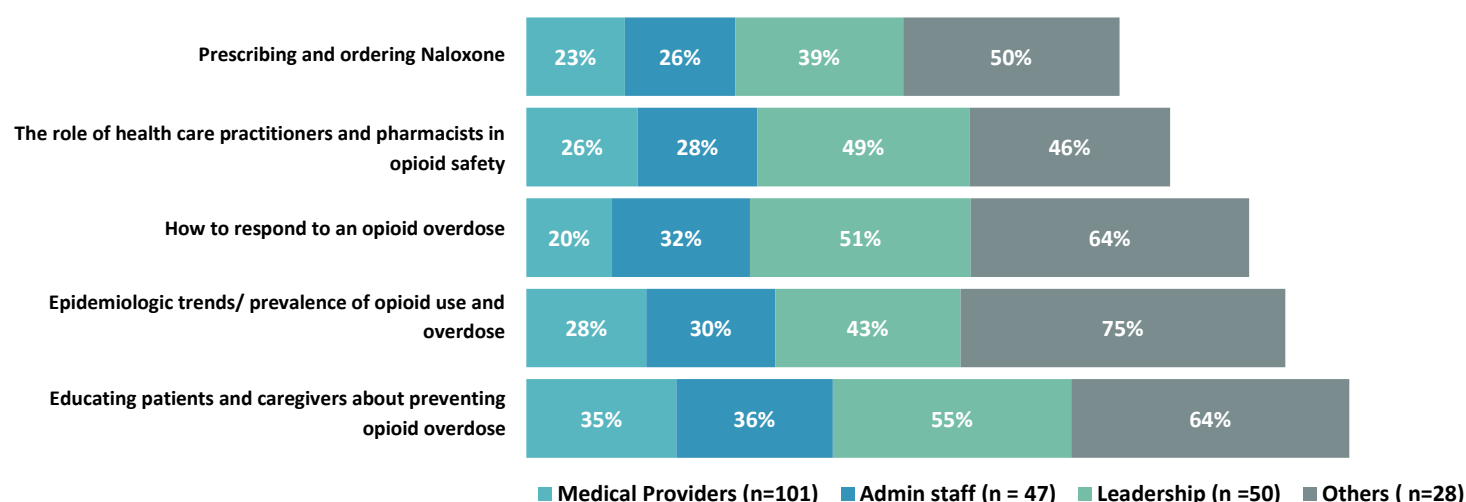
Of the 226 sites surveyed, almost two-thirds were located in Northern Pa., with 38% in Northeastern Pa. and a little over a quarter in Northwestern Pa. Most visits occurred in settings such as long-term care facilities (39%), primary/secondary schools (19%), urgent care centers (19%) and hospitals (15%). Almost half (49%) of interviewees were medical providers, 18% were administrative staff (e.g., office manager, front desk employee), and 18% were organizational leadership (e.g., Director, Chief Executive Officer. Other participants included social workers (4%), school guidance counselors (3%) and behavioral health providers (3%).

Interview Length, Training Content, and Relevance. Approximately half (47%) of CHN visits were 30-45 minutes in length, over one-third (36%) were less than 30 minutes, and the remaining 17% were over 45 minutes. Results of a one-way analysis of variance showed that participants who reported being in leadership roles (n = 50) received significantly longer training sessions ($F(3,222) = 12.81, p < .001$) than other participants. CHNs spent an average of 46 minutes with leaders ($M = 46.30, SD = 22.04$), which was on average 15 minutes more than with medical providers (n = 101, $M = 32.16, SD = 15.30$), administration staff (n = 47, $M = 30.36, SD = 11.42$), and individuals in other roles (n = 28, $M = 28.04, SD = 7.74$).



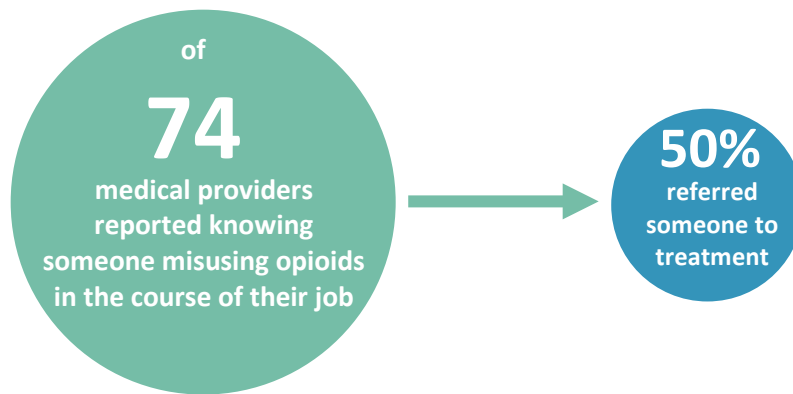
Approximately a third of interviewees (37%) indicated that they would like more information on epidemiologic trends/prevalence of opioid use and overdose, using naloxone to respond to an overdose (35%), the role of health care practitioners and pharmacists in opioid safety (34%), and prescribing and ordering naloxone (30%). Forty-three percent of interviewees indicated that they would like more information on educating patients and caregivers about preventing overdose.

Participants in leadership and other roles such as behavioral health providers and social workers were more inclined to want more information about opioid-related topics post-training



In looking at responses as a function of professional role, the vast majority (64% or higher) of participants who identified as medical providers and administrative staff indicated that they had enough information about each opioid-related topic. These rates were substantially higher for participants in other roles (e.g., leadership, psychologists, social workers) and they were especially interested in topics like prevalence of opioid use and educating people about opioid overdose. Overall, 88% of interviewees agreed that the information they received would help them in their professional role and 89% agreed the information would help them as a bystander witnessing an opioid overdose.

Experience with Opioids. Majority (76%) of those interviewed believed that they knew someone in the course of their job (e.g., students, patients co-workers) who was misusing opioids and within this group (n = 171), 88% wanted to intervene with someone who they believed was misusing opioids. Almost half of respondents (46%) had witnessed an overdose at some point in time and 52% had



referred someone for treatment for an OUD. Interestingly, among the 74 medical providers (73%) who reported knowing someone as misusing opioids during the course of their jobs, only half said they referred someone to

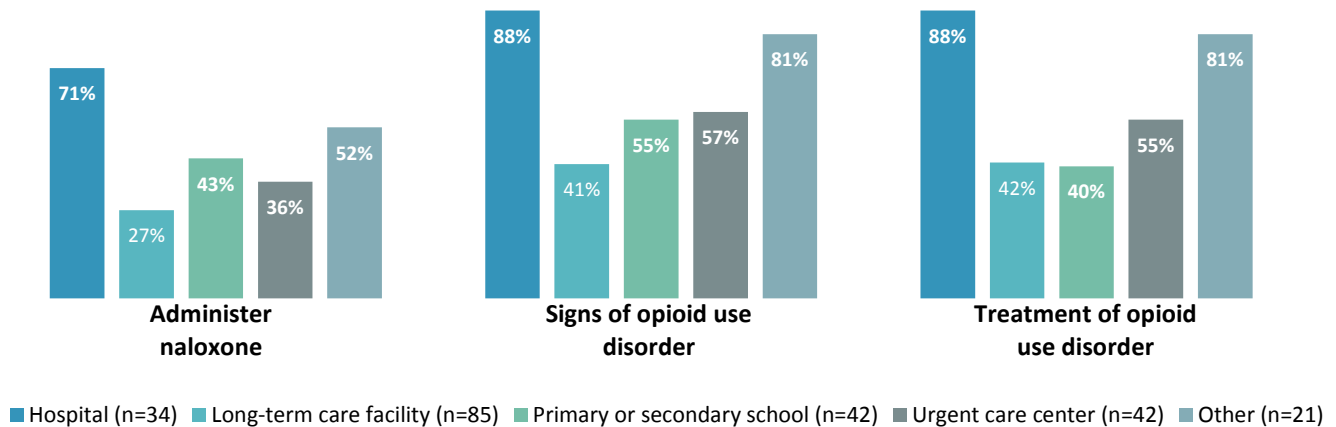
OUD treatment.

Naloxone Trainings and Use. Fifty-four percent of the sites represented had provided staff trainings on how to administer naloxone and 40% had provided trainings for clients/students/patients/family members on how to administer naloxone. Of those organizations that did not provide staff trainings on how to administer naloxone, interviewees were asked to what extent they agreed that they plan to hold a training for staff on naloxone use; 38% indicated they were not responsible for making the decision ($n = 39$), 48% agreed or strongly agreed ($n = 50$), 1% strongly disagreed ($n = 1$), and 13% neither agreed or disagreed ($n = 14$).

Less than a quarter (20%) of interviewees had used naloxone in the context of their job and one in three participants currently carry it on them. Of those who did not carry it ($n=149$), 36% said they plan to carry it in the future following the training. The majority of interviewees reported that naloxone is stocked on site at their organization ($n = 224$, 73%). Specifically, all hospitals stock naloxone on site; however, a substantial number of urgent-care centers ($n = 16$, 38%), long-term care facilities ($n = 30$, 35%), and schools ($n = 8$, 20%) do not. Of those who do not stock naloxone on site, 41% indicated that they do not control the decision to stock naloxone on site ($n = 24$), 32% agreed or strongly agreed ($n = 19$), 2% disagreed ($n = 1$), and 25% neither agreed nor disagreed ($n = 15$) that they would plan to ensure that naloxone is stocked on site in the future.

Opioid Trainings. Over half of the organizations provided trainings for clients/students/patients/family members on the signs (57%) and treatment (54%) of OUD. Of the organizations that did not provide trainings for clients/students/patients/family members on how to administer naloxone, the signs of OUD, or OUD treatment, 46% indicated they were not responsible for making the decision to hold a training on one of these topics ($n = 53$), 41% agreed or strongly agreed ($n = 47$), 3% disagreed or strongly disagreed ($n = 3$), and 10% neither agreed or disagreed that they would hold a future training ($n = 12$).

Hospitals were most likely to have provided trainings to clients/students/patients/family members on recognizing and responding to OUD



Recommendations

Dispensing Sites

Results from the dispenser survey indicated that most (i.e., 98%) dispensers were registered with the PDMP, that they were very likely to use the PDMP when dispensing controlled substances both prior to and following the training, and most (88%) currently stock naloxone.

Naloxone. Despite the fact that the large majority of pharmacies stocked naloxone, 12% (including one chain pharmacy) indicated that they did not. Future efforts should focus on identifying and addressing barriers to stocking the lifesaving medication. Barriers may be system-related, time-limited and/or situation-specific.

Follow-up training. Almost three quarters of dispensers indicated that they were not interested in receiving future related trainings; however, dispensers generally believed that trainings would have more utility if they were provided online rather than in-person. The DOH should consider housing future trainings for dispensers online and should identify opioid-related topics that may be more relevant to dispensers.

Outcome measures. Although the dispenser training focused on a number of different topic areas including the state of the opioid epidemic and Good Samaritan Laws, the survey that was used to measure training impact was focused more narrowly on topics like PDMP registration and utilization. Items that were included in the survey may have allowed for the detection of post-training effects when the PDMP system was in its infancy (as was the case for the first CHN initiative in 2017) but not

currently. Most dispensers are registered with and regularly using the PDMP when dispensing controlled substances. Future evaluation efforts should align with the current goals of dispenser training in terms of impacting dispenser behavior, attitudes, and/or knowledge to evaluate whether the CHN visits to dispenser sites are impactful.

Non-Dispensing Sites

Naloxone. Almost three quarters of non-dispensing sites stocked naloxone; however, a substantial proportion of urgent care centers (38%), long-term care facilities (35%), and schools (20%) did not. As with dispensing sites, future efforts should focus on identifying and addressing barriers to stocking naloxone in these types of settings.

Follow-up training. A substantial proportion of trainees from non-dispensing sites indicated that they would be interested in participating in future trainings on a range of topics related to the opioid epidemic (e.g., how to prevent or respond to an overdose, how to prescribe and order naloxone, how to educate others about preventing an overdose). This was particularly true for respondents in non-medical or administrative roles such as psychologists or social workers. The PDMP office should consider developing subsequent trainings on these topics and possibly making them available in an online rather than in-person format to increase their reach.

General audience trainings. Only a little more than half of those surveyed indicated that their organization had provided trainings for their stakeholders (e.g., students, families, clients, patients) on the symptoms and treatment of OUD. The PDMP office should consider developing trainings on these and other topics that are tailored to more general audiences. Allowing organizations access to such educational materials by making them available on the DOH website and providing guidelines on the type of professional who could lead trainings using these materials could serve to address this training gap.